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(54) ELECTRICALLY CONTROLLED RACING GAME WITH INFORMATION AND CONTROL CENTER

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Publication Classification

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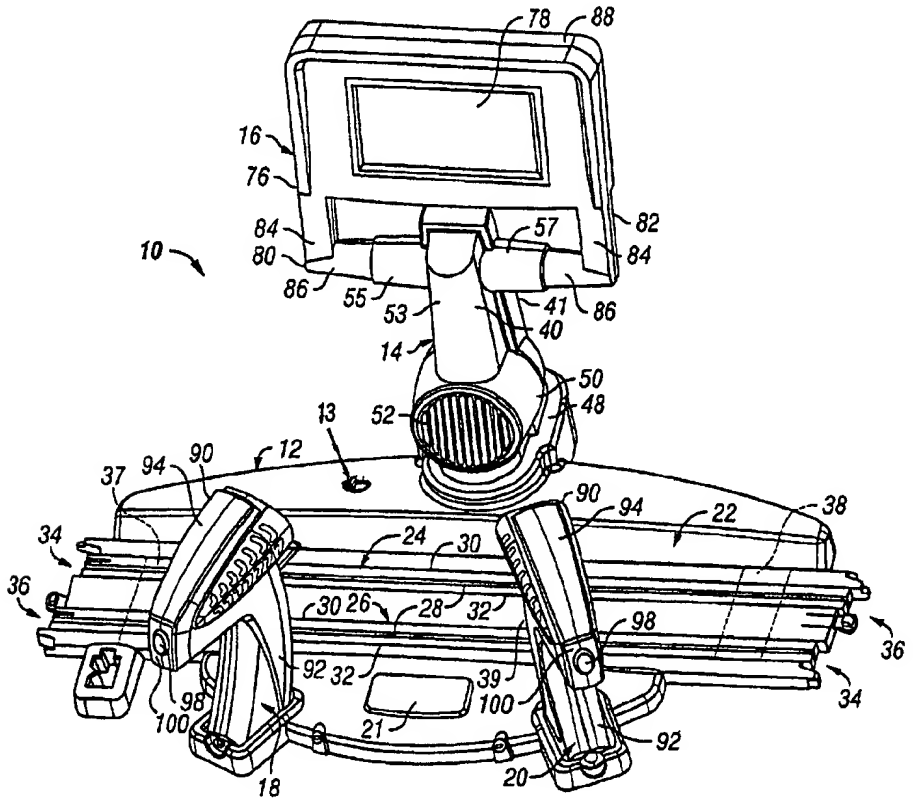
(52) U.S. Cl. 463/58; 463/59; 463/60; 463/6; 463/7

(57) ABSTRACT

A system for racing an electrically powered toy vehicle over a defined course under operator control comprises a continuous track having at least one lane with a pit stop segment and an electrical path extending along the lane for providing electrical power to the vehicle. A control unit is operably connected to the electrical path. The control unit has first one control mechanism that can be manipulated by an operator to vary a speed of the electrical vehicle and another to perform at least one pit stop function such as a tire change or a vehicle refueling. A display is operably connected to the control unit for visually displaying a progression of the pit stop function in response to manipulation of the other control mechanism.



US 20020135580A1

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(12) Patent Application Publication (10) Pub. No.: US 2002/0135580 A1

Kelly et al. (43) Pub. Date: Sep. 26, 2002

(54) METHODS AND SYSTEMS FOR SIMULATING ANIMATION OF WEB-BASED DATA FILES

(76) Inventors: Ann Elizabeth Kelly, Albany, NY (US); Thomas Michael Cox, Fairfield, OH (US); Hale James Husband, Mason, OH (US); George Ludlow Ryon, Schenectady, NY (US)

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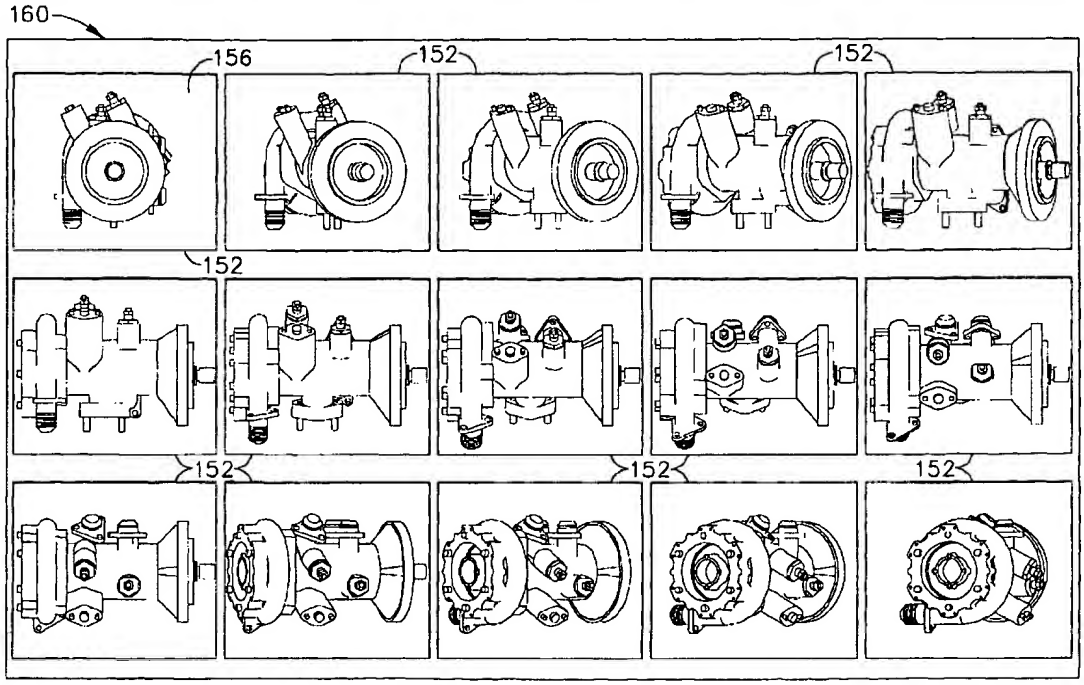
Publication Classification

(51) Int. Cl.[7] G06T 13/00; G06T 15/70

(52) U.S. Cl. 345/473

(57) ABSTRACT

A web-based system that displays a plurality of web-based data files in a simulated animated format in a cost-effective and reliable manner is described. The web-based system includes a client system including a browser, a data storage device for storing the plurality of web-based data files, and a server system accessible by the client system and coupled to the database. The browser includes a viewer that sequentially displays the plurality of web-based data files to simulate an animation effect. The viewer creates an interactive animation of the web-based data files that is viewable without using additional browser plug-in software.



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(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2002/0082077 A1

Johnson et al. (43) Pub. Date: Jun. 27, 2002

(54) INTERACTIVE VIDEO GAME SYSTEM WITH CHARACTERS THAT EVOLVE PHYSICAL AND COGNITIVE TRAITS

(76) Inventors: **Douglas R. Johnson**, San Diego, CA (US); **David B. Fogel**, La Jolla, CA (US); **Timothy J. Hays**, La Jolla, CA (US); **Thomas P. Lang JR.**, Rancho Santa Fe, CA (US)

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(21) Appl. No.: 09/748,362

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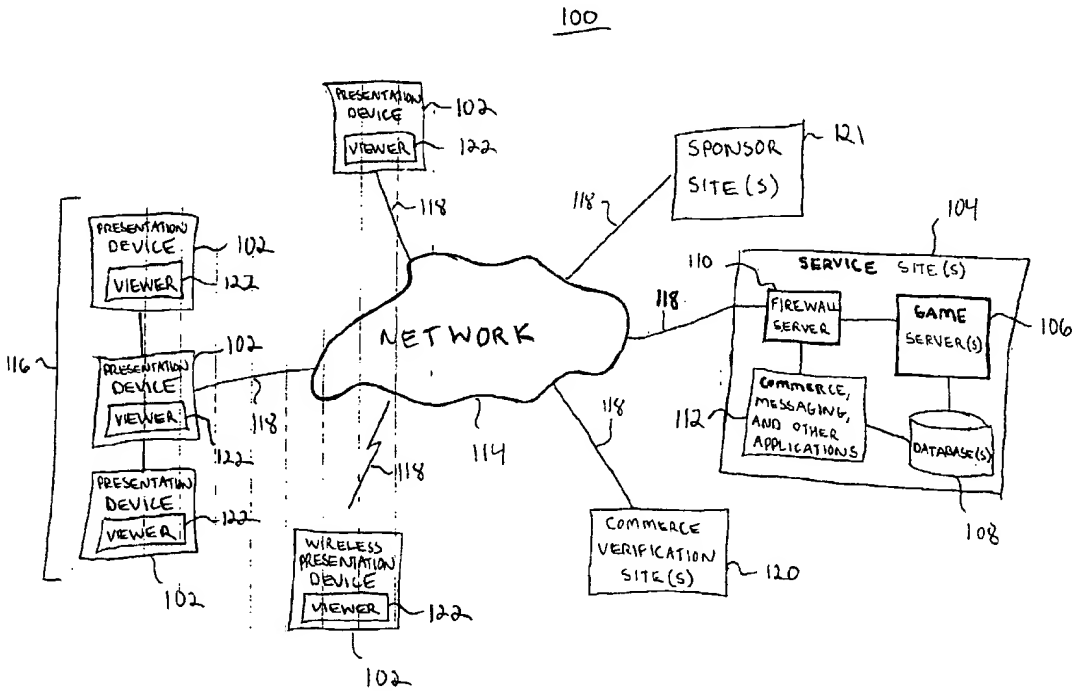
Publication Classification

(51) Int. Cl.[7] G06F 19/00

(52) U.S. Cl. 463/30; 463/43

(57) ABSTRACT

A server-based video game system maintains a number of video game characters having computer-simulated genetic ("digenetic") structures that prescribe a number of physical and cognitive performance traits and characteristics for the video game characters. The system allows end users to establish remote online access to the game characters (via, e.g., the Internet). The results of competitions and training activities are based upon the game characters' digenetics, the conditions of the game environment, and the game characters' current levels of physical and cognitive development. The game characters' performance capabilities and cognition are updated continuously in response to the results of competitions and training activities. Competition and training results can be processed by the game servers and transmitted to the end user presentation devices for graphics rendering. In this manner, the video game system need not be burdened by network latency and other delays. The game system also supports game character breeding; game character evolution based upon the digenetics; and game character buying, trading, selling, and collecting.



US006121981A

United States Patent [19]

Trower, II et al.

[11] Patent Number: 6,121,981

[45] Date of Patent: Sep. 19, 2000

[54] **METHOD AND SYSTEM FOR GENERATING ARBITRARY-SHAPED ANIMATION IN THE USER INTERFACE OF A COMPUTER**

[75] Inventors: **Tandy W. Trower, II**, Woodinville; **Mark Jeffrey Weinberg**, Carnation; **John Wickens Lamb Merrill**, Redmond, all of Wash.

[73] Assignee: **Microsoft Corporation**, Redmond, Wash.

[21] Appl. No.: **08/858,555**

[22] Filed: **May 19, 1997**

[51] **Int. Cl.**[7] **G06T 13/00**

[52] **U.S. Cl.** **345/473**; 345/348; 345/523; 345/977

[58] **Field of Search** 345/473, 474, 345/523, 977, 348

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,884,972	12/1989	Gasper .	
5,111,409	5/1992	Gasper et al. .	
5,278,943	1/1994	Gasper et al. .	
5,287,446	2/1994	Williams et al. .	
5,377,997	1/1995	Wilden et al. .	
5,425,139	6/1995	Williams et al. .	
5,430,835	7/1995	Williams et al. .	
5,613,056	3/1997	Gasper et al. .	
5,630,017	5/1997	Gasper et al. .	
5,838,334	11/1998	Dye	345/503

OTHER PUBLICATIONS

Ken Getz, "Office 97 Shared Programmable Objects," 1997, MSDN Library, Apr. 1998 Version.

Toggle Entertainment, Inc., "HTTP://togglethis.com," 1997, 1998, World Wide Web.

Microsoft Corp., "Microsoft visual Basic for Applications, Version 5.0 Solutions Enhancements Guide," Oct. 1996, MSDN Library, Apr. 1998 Version.

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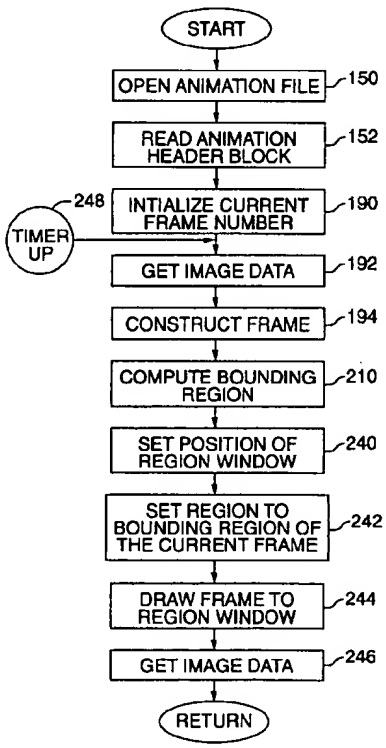
[57] **ABSTRACT**

An animation method and system generates interactive animation in the foreground of the user interface of the computer. The system generates arbitrary shaped animation that is independent of the background image of the user interface by computing a bounding region for a current animation frame in real time and creating a non-rectangular window to match this bounding region. The system draws the animation to this non-rectangular window, which clips the frame to the bounding region of the graphical object. The system can be used to create interactive animation that is not confined to a rectangular window of a hosting application or a window of the application making the request to playback animation.

19 Claims, 7 Drawing Sheets



US005880731A

United States Patent [19]

Liles et al.

[11] Patent Number: 5,880,731

[45] Date of Patent: *Mar. 9, 1999

[54] USE OF AVATARS WITH AUTOMATIC GESTURING AND BOUNDED INTERACTION IN ON-LINE CHAT SESSION

[75] Inventors: **Christopher A. Liles**, Seattle; **Manuel Vellon**, Bellevue, both of Wash.

[73] Assignee: **Microsoft Corporation**, Redmond, Wash.

[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: **572,307**

[22] Filed: **Dec. 14, 1995**

[51] **Int. Cl.**[6] **G06F 3/00**

[52] **U.S. Cl.** **345/349**; 345/358; 345/473; 345/330

[58] **Field of Search** 395/329, 330, 395/331, 332, 348, 349, 358, 806, 807, 957, 960, 972; 345/329, 330, 331, 332, 348, 349, 358, 302, 957, 960, 972, 473

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,257,306	10/1993	Watanabe	395/330 X
5,347,306	9/1994	Nitta	395/330 X
5,491,743	2/1996	Shiio et al.	395/330 X
5,572,248	11/1996	Allen et al.	395/330 X
5,613,056	3/1997	Gasper et al.	395/806 X
5,617,539	4/1997	Ludwig et al.	395/330 X
5,682,469	10/1997	Linnett et al.	345/473

OTHER PUBLICATIONS

Carlsson et al., "DIVE—a Multi-User Virtual Reality System", IEEE Virtual Reaity Annual International Symposium, pp. 394–400, Sep. 1993.

Ohya et al., "Real-time Reproduction of 3D Human Images in Virtual Space Teleconferencing", IEEE Virtual Reality Annual International Symposium, pp. 408–414, Sep. 1993.

Robinett, "Interactivity and Individual Viewpoint in Shared Virtual Worlds: The Big Screen vs. Networked Personal Displays", Computer Graphics, vol. 28, No. 2, pp. 127–130, May 1994.

Benford et al., "Supporting Cooperative Work in Virtual Environments", The Computer Journal, vol. 37, No. 8, pp. 653–668, 1994.

Fukuda, Kazutomo et al., "Hypermedia Personal Computer Communication System: Fujitsu Habitat," Fujitsu Sci. Tec. J., 26, 3, pp. 197–206.

Primary Examiner—Matthew M. Kim
Assistant Examiner—Crescelle N. dela Torre
Attorney, Agent, or Firm—Ronald M. Anderson

[57] **ABSTRACT**

Avatars representing participants in a graphic chat session are periodically animated to produce a gesture that conveys an emotion, action, or personality trait. Each participant in the chat session is enabled to select one of a plurality of different avatars to represent the participant in a graphic chat session. Associated with each avatar is a bitmap file that includes a plurality of frames illustrating the avatar in different poses, actions, and emotional states. Selected frames are displayed in rapid sequence in accord with a script file to create an animation effecting each gesture. The same script file is used to define a gesture for all of the avatars used in the chat session. A selected gesture can be transmitted with a text message to convey the user's emotional state. A gesture associated with the avatar is automatically displayed from time to time when the avatar is not otherwise gesturing or moving. The user can determine participants in the chat session with whom the user will interact, e.g., by defining a proximity radius around the user's avatar or by selecting the specific participants from a list. Avatars of participants that are outside the proximity radius (or otherwise not selected) and messages received from them are not displayed on the user's monitor.

31 Claims, 9 Drawing Sheets